

REMARKS/ARGUMENTS

STATUS OF CLAIMS

In response to the Office Action dated October 2, 2007, claims 1, 2, 10 and 14 have been amended. Claims 1-11 and 14-21 are now active in this application. No new matter has been added.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 10, 11 and 14-21 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In support of this position, the Examiner contends that with regard to “making bolder the line of the font image” in claim 10, the definition of the line within the font image is unclear, as well as whether the line is comprised within the border or outer region of the image, or is a character within the image. Finally, the Examiner maintains that with regard to “thinner font line” in claim 14, the definition of the recited font line is unclear.

To expedite prosecution, claim 10 has been amended to recite, *inter alia*:

wherein

generating the three-dimensional image from said character information includes thinning a horizontal resolution of the character information $1/n$ when a number of viewpoints for the three-dimensional image is n , and then making a line forming a portion of three-dimensional image to have one of a horizontal dimension and vertical dimension that is bolder than that of a line representing a corresponding portion of the character information.

In addition, independent claim 14 has been amended to recite, *inter alia*:

...

said 2D/3D conversion unit converts two-dimensional image data obtained through synthesis by said second synthesis unit into three-dimensional image data, converting two-dimensional data into three-dimensional image data by the 2D/3D conversion unit including thinning a horizontal resolution of the two-

dimensional data to $1/n$ when a number of viewpoints for the three-dimensional image is n , wherein

a first font image and a second font image corresponding to the character information are provided,

a line forming a portion of said second font image has one of a horizontal dimensional and vertical dimension that is thinner than that of a line representing a corresponding portion of said first font image, said first font image is used when the character information is three-dimensionally displayed and said second font image is used when the character information is two-dimensionally displayed.

This subject matter is disclosed, for example, at page 37, line 8 to page 39, line 24 of the present application. That is, when the number of viewpoints is 2, the resolution of the two-dimensional data is thinned by half. However, other thinning amounts occur ($1/n$) when there are a different number of viewpoints (n).

It is submitted that when the language of claims 10 and 14, as amended, is read in light of the specification as is required, an artisan would readily understand the metes and bounds of the invention. Therefore, it is believed that claims 10 and 14, as amended, are definite and it is respectfully urged that the rejection of claims 10 and 14 as being indefinite be withdrawn.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 102 AND § 103

I. Claims 1-9 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Osaka et al. (U.S. Patent 6,023,277).

To expedite prosecution, claims 1 and 2 have been amended to recite, *inter alia*:

wherein said control information includes the number of viewpoints for said three-dimensional image and at least i) ***camera arrangement information for image pick-up***, ii) a direction of thinning during generation of said three-dimensional image from said two-dimensional image, iii) ***parallax amount shift limit information***, iv) ***parallax image switching pitch information***, iv) image

arrangement of said two-dimensional images corresponding to parallax images, and v) reversal information on each of said parallax images; ...

That is, amended claims 1 and 2 now require that the control information includes the number of viewpoints for the three-dimensional image and at least information i) to v).

Osaka et al. neither discloses nor suggests that the control information includes the number of viewpoints for the three-dimensional image, camera arrangement information for image pick-up, a direction of thinning during generation of said three-dimensional image from the two-dimensional image, parallax amount shift limit information, parallax image switching pitch information, image arrangement of said two-dimensional images corresponding to parallax images, and reversal information on each of the parallax images.

Consequently, amended independent claims 1 and 2 are patentable over Osaka et al., as are dependent claims 3-9.

II. Claims 10 and 11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Osaka et al. in view of Akamatsu et al. (U.S. Patent 6,313,866) in further view of Ellson et al. (U.S. Patent 5,805,783).

As noted above, independent claim 10 has been amended to recite, *inter alia*:

wherein
generating the three-dimensional image from said character information includes thinning a horizontal resolution of the character information 1/n when a number of viewpoints for the three-dimensional image is n, and then making a line forming a portion of three-dimensional image to have one of a horizontal dimension and vertical dimension that is bolder than that of a line representing a corresponding portion of the character information.

Neither Osaka et al., Akamatsu et al. nor Ellson et al. discloses or suggests generating the three-dimensional image from the character information includes thinning a horizontal resolution of the character information $1/n$ when a number of viewpoints for the three-dimensional image is n . Therefore, amended independent claim 10, and claim 11 depending from amended claim 10, are patentable over Osaka et al., Akamatsu et al. and Ellson et al.

III. Claims 14-21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Osaka et al. in view of Iizuka et al. (U.S. Patent 6,657,655), and further in view of Ellson et al.

As noted above, independent claim 14 has been amended to recite, *inter alia*:

...
said 2D/3D conversion unit converts two-dimensional image data obtained through synthesis by said second synthesis unit into three-dimensional image data, converting two-dimensional data into three-dimensional image data by the 2D/3D conversion unit including thinning a horizontal resolution of the two-dimensional data to $1/n$ when a number of viewpoints for the three-dimensional image is n , ...

Neither Osaka et al., Iizuka et al. nor Ellson et al. discloses or suggests that converting two-dimensional data into three-dimensional image data by the 2D/3D conversion unit including thinning a horizontal resolution of the two-dimensional data to $1/n$ when a number of viewpoints for the three-dimensional image is n . Therefore, amended independent claim 14, and claims 15-21 depending from amended claim 14, are patentable over Osaka et al., Iizuka et al. and Ellson et al.

IV. In view of the above, the allowance of claims 1-11 and 14-21, as amended, is respectfully solicited.

CONCLUSION

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Edward J. Wise (Reg. No. 34,523) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: January 2, 2008

Respectfully submitted,

By 

Charles Gorenstein

Registration No.: 29,271

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant